AMENDMENT NO 1 JULY 2013
TO
IS 1288 : 1982 METHODS OF TEST FOR MINERAL GYPSUM

(Second Revision)

(*Page* 18, *clause* **14.4**) **—** Insert the following new clause after **14.4**:

‘**15 DETERMINATION OF FILTRABILITY**

15.3 Apparatus

15.1.1 *Water Bath*, thermostatically controlled.

15.1.2 *Electric Stirrer*, of stainless steel.

15.1.3 *Vacuum Pump*, fitted with mercury manometer.

15.2 Reagent

15.2.1 *Ammonium Carbonate Liquor*, containing 17 g of NH_3/100 ml and the ratio of CO_2/NH_3 to be 1:30 (*see* Note).

NOTE — The reagent is prepared by dissolving 850g of ammonium bicarbonate in 1 litre of 8.5 percent ammonium hydroxide. This gives approximately 17 g of ammonia (NH_3) and 22.5 g of carbon dioxide per 100 ml in the ration of 1:30. The final adjustment should be made by mixing solid ammonium bicarbonate or by adding 8.5 percent ammonium hydroxide as required.

15.3 Procedure

Grind the gypsum sample, screen to the following sizes and make a mixture of different sizes as specified below:

Particles of IS Sieve	*Mass* g
250 micron to 125 micron	13
125 micron to 75 micron	40
Less than 75 micron	76
Total	129

15.3.1 Take 129 g of gypsum as prepared in **15.3** in a 400 ml beaker and add 189 ml of ammonium carbonate liquor to it. Stir the mixture constantly for 4 h at a rate of 180 to 200 rev/min in a water-bath (at a temperature of 65 to 68^{o}C). Keep the beaker immersed in the water-bath in such at a way that the level of the reacting mass remains below water level. Keep the beaker covered making an allowance for the stirrer.

15.3.2 After 4 h of reaction, take 189 ml of the magma and filter through a Buchner funnel (9 cm diameter) fitted with Whatman filter paper No.1 or an equivalent under a suction of 30 to 35 cm of mercury.

15.3.3 Note the time taken between the fall of first drop of the filtrate and first appearance of solid surface on the funnel by a stop watch. This is the filterability time for the sample.'

(CHD 1)

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